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RESEARCH ARTICLE



“We’re Going Under”: The Role of Local News Media in Dislocating Climate Change Adaptation

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ABSTRACT

As carbon emissions continue to rise, the need to adapt to climate impacts has become increasingly urgent. Planning and implementing climate adaptation is often left to local authorities and is fraught with the challenge of negotiating with multiple stakeholders holding differing interpretations of climate change. In such a space, local media has a critical role in communicating these differing perspectives within communities. In this article we explore the central role of a local newspaper in shaping public debate over the implementation of a climate adaptation plan in a coastal region of Australia. Rather than providing an arena for public discussion and constructive debate, we find that the newspaper adopted a clear position rejecting the need for changes in planning for anticipated climate impacts. We use the case study to explore how media discourse contributes to (i) the construction of an antagonistic debate undermining climate science, and (ii) strengthening the hegemony of economic value and property rights. In response, we suggest shoring up political alliances for climate change, including in the local media, as a basis for social change.

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Introduction

Climate change is rapidly becoming a lived experience across the globe. This is evident through worsening climate impacts such as bushfires, flooding, and extreme weather events. For coastal communities, accelerating rates of sea level rise highlight the urgent need to formulate adaptation plans to minimize vulnerability to storm surges and inundation (IPCC, 2013). Yet adaptation to climate change is a complex policy issue. While early research on adaptation tended to focus on technological barriers and averting risk, recognition that adaptation is context and location dependent has led to an increasing focus on local government and community planning (Fünfgeld & McEvoy, 2014; Leitch, 2017). This focus brings into play a number of key considerations around how people relate to climate change, involvement in decision-making, and the governance of climate policies (Carvalho & Peterson, 2012). Media representations are central in understanding the politics of local adaptation.

Using a case study of adaptation to sea-level rise in Lake Macquarie, Australia, we investigate the influence of local media in the process of climate adaptation policy development. In particular, we examine how the community engaged with the local newspaper, the *Newcastle Herald*, as a means of building resistance to the local council’s policy, and ultimately coerced the council to adopt a “wait and see” approach. Using Laclau and Mouffe’s (1985) conceptual development of hegemony, we argue that the newspaper coverage was instrumental in this campaign. Far from acting as an arena for the debate, the newspaper assisted in establishing a political frontier between antagonists

and supported the current economic hegemony against acting on climate change. The case study has theoretical implications for understanding the politics of climate change and the media's role therein, as well as practical implications for strengthening action on climate change.

Local climate adaptation and media representation

Local governments face a range of challenges in responding to climate change. Considering local governments are often focussed on immediate issues of infrastructure management, climate adaptation can appear a “distant and cloudy” concern (Crabbé & Robin, 2006, p. 119). For this reason, local adaptation measures tend to be reactive rather than proactive, and prioritize disaster and economic management (Romsdahl et al., 2017). For instance, researchers have noted an inclination towards implementing technocratic solutions, while public communication and participation is sometimes lacking (Serrao-Neumann et al., 2015). In addition, local authorities often face the challenge of managing climate change adaptation activities without the requisite funding, resources or higher-level government support (Moloney & Fünfgeld, 2015; Serrao-Neumann et al., 2015). As such, community engagement and support for policy change is central to the development and implementation of proactive policies to alleviate the worst impacts of climate change.

Despite the local impacts of climate change, this level of engagement is often lacking (Moser & Pike, 2015). Elected representatives are acutely aware of the need to gain community support across a range of issues to bolster their campaigns for re-election (Leitch & Robinson, 2012). At the same time, wealthy, politically savvy property owners have the wherewithal to organize and contest local adaptation policies that threaten their financial wellbeing (Gibbs, 2016). As a result, adaptation strategies may be driven by perceptions of what communities will accept, with local governments reluctant to implement stronger measures for fear of community backlash (Warren-Myers et al., 2018). Such an approach generates responses aimed at avoiding short-term financial costs (Fünfgeld & McEvoy, 2014), while ignoring the need to plan for future generations.

Local media is a key avenue for these actors to communicate their position on climate change and adaptation measures (Howarth & Anderson, 2019). At the local level, environmental issues are much more likely to receive media coverage and to be seen as salient in directly impacting readers (Howarth & Anderson, 2019; Lester & Cottle, 2009). Given the media's important role as the interface between scientific information and the public, much research has been dedicated to understanding how the media influences climate change debates (see, for example, Boykoff, 2008, 2013; Miliuskas & Anderson, 2016). Media can serve both as a source of information, as well as affecting the ways in which “people come to understand, talk, care, and act around climate change” (Gunster et al., 2018, p. 775). As King, Schneer and White have argued, news media has the ability to “activate public expression” (2017, p. 1) and engage citizens in public policy and politics. The role of media as an arena for deliberation, or as a public sphere, where collective expression can influence public policy is central to representative democracy (Habermas, 1996).

Examinations of media coverage of climate change have been critical of the ways in which the issue has been communicated. Boykoff (2011) has explained that part of the struggle pertains to journalistic norms and practices, which tend to obscure the ability of media to provide detailed information about particular issues. Dramatization, for instance, can lead media to focus on the more spectacular (often visual) or conflictual elements of a story (Bennett, 2009). Further, Bennett (2009) identifies how media provides a (perhaps overly) critical view of authorities' responses to dramatic events. Examples of this “authority-disorder bias” are how media emphasizes uncertainties within climate science (Painter, 2013) and the negative coverage of politicians acting on climate change (McKnight, 2010). Finally, the notion of “bias as balance” emphasizes media practices which aim to give equal voice to competing opinions, even where one view is largely discredited. In climate change coverage this can give credibility to minority sceptical views (Boykoff & Boykoff, 2007).

By questioning the science and urgency of climate change, this kind of media coverage has a tendency to narrow the role for adaptation into responding to disruptive events, rather than opening

up discussions about proactive policy (Harcourt et al., 2020). For example, Ruiiu (2020) has argued that this emphasis on uncertainty provides a space where the consequences of climate change can be questioned. What these studies suggest, then, is that rather than being a space for divergent opinions in climate change debate, the media can also become a political actor in its own right (Moser, 2016).

Signifying climate change

Part of the difficulty in responding to climate change is that it challenges the hegemony of economic growth (Nyberg et al., 2013), with media tending to legitimise dominant discourses when the environment is pitted against profit imperatives (Yacoumis, 2018). Popularly termed by Gramsci (1971), the concept of “hegemony” has been used to refer to the cultural apparatus of state power – the ways in which justification and support for the existing order is sought beyond the use of state violence. Laclau and Mouffe’s (1985, p. 96, 105) rearticulation of hegemony emphasizes its contingent and contested nature, arguing that it occurs through a process of “articulatory practice”, which “constitutes and organizes social relations”. Discourse refers to relational systems linking together identities and meanings, while hegemony is the formation of a dominant discourse and active repression of competing discourses.

Central to constructing hegemony is the process in which the meaning of signs and identities are temporarily fixed. In this process, key *nodal points* – “privileged signifiers that fix the meaning of a signifying chain” (Laclau & Mouffe, 1985, p. 112) – function to form a *chain of equivalence*. Hegemony occurs in the moment when nodal points form a logic of equivalence – a “stable political frontier” (Laclau, 2005, p. 133) of demands and interests (Mouffe, 2018). This frontier also divides the social relations into antagonistic positions, since, as noted by Methmann (2010), this stability depends on the exclusion of some elements – those which might disrupt hegemony need to be either incorporated or rejected. In these moments, dislocation can also occur, when signifiers are dislodged from the discursive formation. Signifiers and identities are set adrift through the politics by changing or losing meaning. A floating signifier will change meaning as it “tries conceptually to apprehend the logic of the displacements of that frontier” (Laclau, 2005, p. 133) – it functions to “link up” within a chain of equivalence. An empty signifier, on the other hand, loses meaning in this process.

In terms of communicating climate change, two responses are illustrative of the processes of signification. One is to form a logic of equivalence between the signifiers of climate change and the economy; this is often an attempt to depoliticize the challenges climate change poses (Kvidal-Røvik, 2018). Through discourses which attempt to link climate change solutions to economic growth, for example, there is an effort to create a “win-win” consensus situation which avoids political contestation (see, for example Machin, 2019). A second response to representing climate change has been to stress the localized impacts, to make what is often interpreted as an abstract concept more immediate (Lester & Cottle, 2009). However, the research on these symbolic representations is mixed. By emphasizing extreme weather events, for instance, people may become more concerned about climate change, but this is only temporary (Konisky et al., 2016). Furthermore, dramatic imagery may lead people to become anxious and turn to denial (Brulle & Norgaard, 2019).

Finally, these representations can also function to split the identity of signifier; rather than finding shared meaning, multiple meanings, which may be contradictory, are made. For example, Methmann (2010, p. 355) argues that climate change “represents the discursive ‘outside’ that tends to rupture the existing hegemonic order and reactivates various other signifiers that seemed to be deeply sedimented”. For this reason, Methmann (2010, p. 357) argues that climate change has been linked with “a range of heterogeneous and sometimes contradictory practices” which has also rendered it an empty signifier.

Following Mouffe (1999), numerous writers have suggested that a better way forward in tackling climate change is to bring politics to the fore (Carvalho & Peterson, 2012). Rather than obscuring the challenging nature of climate change, Kenis and Mathijs (2014) have suggested that the contradictions need to be exposed in order for constructive alternatives to be articulated. To this end, we present a case study with climate change communication and politics at its center. The analysis of the case allows us to explore not only how the media presents climate information, but how this information is interpreted, and how the media influences actors within the policy process (Harcourt et al., 2020). Finally, we suggest that the case study illustrates how media discourse on climate change contributes to a hegemonic position which centers property values at the expense of planning for adaptation.

Study context

Implementing climate adaptation policies

Our case study focuses on the adaptation plans of Lake Macquarie City Council (LMCC), an urban local government area which is partly built around a large tidal lake, and has been increasingly subject to flooding (Giles et al., 2016). Concerned about the increased inundation risks due to climate change, including extreme weather events, rainfall, and sea-level rise, in August 2008, LMCC implemented a *Sea Level Rise Preparedness Adaptation Policy* (LMCC, 2008). The policy included guidelines for floor levels to be 2.27 m above sea level for new residential developments (2.85 m for commercial developments) and was followed up by writing to approximately 7,000 landholders, advising them that their properties may be in an area subject to lake flooding or affected by sea-level rise, and inviting them to participate in a consultation process. The dissemination of this information to property owners sparked significant media attention and controversy, fueled by fears that the council's sea-level rise policy would result in a dramatic drop in property values and increases in insurance costs. Public meetings and rallies were held in opposition to the changes, as council officers and councillors were "referred to as idiots in the media" and threatened with legal action (NSW Parliament, Piper & Stokes, 2012, para.7). This opposition was overwhelmingly from property owners, developers, and conservative politicians, who then became further involved in the debate.

From April 2013, the council embarked on the process of collaborating with residents from two suburbs to develop one of the first coastal local adaptation plans in Australia (Giles et al., 2016). While independent surveys in 2008 had shown residents were concerned about the potential impacts of climate change on economic well-being (Connor, 2010), the development of the adaptation plan was fraught with controversy; the Council came under persistent criticism from residents, local businesses, and the local newspaper, the *Newcastle Herald*. Following years of community consultation, the coverage in the paper changed tact, praising the draft adaptation plan as a "massive change" in the council's approach to sea-level rise, and claiming it as a win for residents whose "property rights are no longer being ignored" (*Newcastle Herald*, 2015). Despite its recognition as an outstanding case study in coastal adaptation (Stewart, 2017), the final plan adopted a "protect and raise" strategy, with many actions not required until sea levels had risen to a specified trigger point (LMCC, 2016).

The Australian media landscape

Compared to other Western democracies, Jones and Pusey (2010) argue that in Australia the notion that the media has an important role in creating "informed citizenship" has been relatively weak. A lack of willingness from governments to tackle both regulation of media content as well as media ownership has led to the latter being highly concentrated, and the former increasingly polarized. In 2016, two companies owned 90% of metropolitan and daily newspapers; the Murdoch-owned News Corporation dominating ownership at 65%, and Fairfax (publicly listed at the time) 25% (Papandrea &

Tiffen, 2016). The dominance of the Murdoch press in this landscape is important, because research has consistently shown that News Corporation's coverage of climate change depicts it as a political, rather than scientific or environmental, issue, with a strong emphasis on uncertainty (McKnight, 2010). This type of representation has potential influence on the political arena of climate policy (Tranter, 2020), since, while "media coverage of climate change does not determine how people engage with climate change ... , it does shape the possibilities for engagement" (O'Neill, 2013, p. 11).

Importantly, the *Newcastle Herald*, was owned at the time by Fairfax – a news organization which had a reputation for giving more informative coverage in relation to climate change (Anderson et al., 2018; Lidberg, 2018). However, during the period of the case study, the paper consistently ran articles suggesting that the council was encroaching upon individual property rights and that the policy would lead to a fall in property values in the affected areas. The publication is the only regional newspaper in the area, which includes the local government areas of both Lake Macquarie and Newcastle with a combined population of 363,039 in 2016 (Australian Bureau of Statistics, 2019). As with much print media at the time, the readership of the paper declined over the years of the case study, going from 127,000 on weekdays and 183,000 on weekends in 2009 (Roy Morgan Research, 2011), to 75,000 on weekdays in 2017 and 92,000 in 2017 (Roy Morgan Research, 2017) although during this time much of the publications content was increasingly available online for free (it later implemented a paywall). The broader region that the paper serves is home to one of the world's largest coal ports (in Newcastle), adjacent to a major coal-mining region. Research has shown that the *Newcastle Herald* has given favorable coverage to climate sceptics in the past, however, according to a content analysis by McKewon (2012), the paper also gave extensive coverage to opposing viewpoints.

Data collection and analysis

In order to understand the ways in which the local newspaper presented and informed the climate adaptation debate, we conducted a textual analysis of the 206 articles related to Lake Macquarie and sea-level rise appearing in the *Newcastle Herald* from the period early in 2008 to mid-2016. The articles covered the period during which the region was recognized as vulnerable to sea-level rise, up until the publication of the council's first detailed adaptation plan. Newspaper articles were thematically coded for their depiction of the various stakeholders and explanations of climate change. Initial analysis suggested that articles consistently quoted controversial viewpoints within the debate, questioned the science of climate change, and repeatedly claimed that the council's adaptation undermined individual property rights. Table 1 provides a summary of key newspaper articles quoted below.

To further understand how the *Newcastle Herald* informed the debate and how it evolved over time, we conducted 46 semi-structured interviews with people involved in or knowledgeable about the debate (with approval from the Human Research Ethics Committee of the University of Sydney – Approval Number 2017/708). The interview participants included the resident groups involved in the consultation, local businesses, councillors, council staff and some experts (see Table 2 for a summary of the interviews). Interviews lasted between 30 and 95 min and included questions about involvement in the adaptation planning process, views on the roles of other stakeholders and concern about climate change. Interviews were fully transcribed and data was thematically coded using QSR NVivo 12.

Coding of the media articles and transcribed interviews was inductive, and carried out by two members of the research team undertaking constant comparison to improve inter-coder reliability. The primary coding trees included attitudes to climate change, opinions of other stakeholders and responses to the policy process, such as concerns for democracy and property rights. It was apparent that many participants saw the media – and the local newspaper, the *Newcastle Herald* in particular – in either a negative or positive light, depending on their position as to the policy debates. In order to further examine these views, we then conducted axial coding of the interviews to identify the key issues related to the media in interviews.

Table 1. Key articles from the *Newcastle Herald*.

Year	Author/ Date	Heading	Code
2008	Cronshaw, D., April 15	<i>Coast in danger of disappearing</i>	NH1
	Cronshaw, D., May 3	<i>From lake to bay, a rising fear</i>	NH2
	Cronshaw, D. May 3	<i>We're going under</i>	NH3
	Cronshaw, D., May 19	<i>Homes under threat</i>	NH4
2010	Cronshaw, D., November 18	<i>Sea rise may drop values</i>	NH5
	Cronshaw, D. March 19	<i>Rise in expectations</i>	NH6
2011	Editorial, October 14	<i>Flood plans shoring up</i>	NH7
	Cronshaw, D., October 28	<i>Turning up the heat: Climate class action</i>	NH8
	Cronshaw, D., November 9	<i>MP takes issue with sea-level guidance: A green outlook.</i>	NH9
	Lewis, P., November 9	<i>LMCC and McCloy Class Action Cartoon</i>	NH10
2012	Cronshaw, D., November 25	<i>Level of action on rise: Litigation changes tack</i>	NH11
	Goffet, N., January 27	<i>Debate rises on sea levels as McCloy brings in experts.</i>	NH12
	Cronshaw, D., January 31	<i>Climate policy costly</i>	NH13
	Cronshaw, D., February 1	<i>Speakers reject sea rise outlook.</i>	NH14
	Cronshaw, D., February 9	<i>Rising levels at sea: Measures are different.</i>	NH15
	Editorial, February 25	<i>Residents likely winners in policy change</i>	NH16
	Cronshaw, D., March 3	<i>Changing climate</i>	NH17
	Campbell, Y., April 18	<i>Flood policy blamed for value slump</i>	NH18
	Cronshaw, D., June 22	<i>Climate change cash</i>	NH19
	Editorial, August 25	<i>Rally a stand against sea level policy</i>	NH20
	Cronshaw, D., September 3	<i>Contest set to be close</i>	NH21
	Cronshaw, D., October 11	<i>Sea change forecast: Planning review needed</i>	NH22
	Cronshaw, D., March 12	<i>Climate-change fears lead to higher houses</i>	NH23
	Cronshaw, D., April 29	<i>Demolition in mind: Thousands of houses to be part of "retreat"</i>	NH24
	Editorial, April 29	<i>Planning for rising sea levels</i>	NH25
2013	Cronshaw, D., April 30	<i>Alarm at sea plan</i>	NH26
	Carter, B., May 23	<i>City's sea-level plans don't hold water</i>	NH27
	Cronshaw, D., May 31	<i>Fears sea-level policy may slash \$1bn off property values</i>	NH28
	Cronshaw, D., June 1	<i>\$1billion "going under"</i>	NH29
	Cronshaw, D., June 1	<i>Fighting to stay afloat</i>	NH30
	Cronshaw, D., June 10	<i>Call for sea level science: Legal risks turn on tides</i>	NH31
	Cox, A., June 12	<i>Storm floods confused with sea level rise (Opinion)</i>	NH32
	Cronshaw, D., July 1	<i>Plans snag on sea rise: Residents challenge council property policy</i>	NH33
	Cronshaw, D., July 4	<i>Sea level measures "eroding our rights"</i>	NH34
	Cronshaw, D., July 27	<i>Rising sea notations "hurt sales"</i>	NH35
	Cronshaw, D., August 26	<i>Push to dump sea rise notes from 10,000 homes</i>	NH36
	Cronshaw, D., November 28	<i>Floating houses for rising Lake</i>	NH37
	Editorial, June 10	<i>Planning with floods in mind</i>	NH38
	Cronshaw, D., June 14	<i>Land controls drown values: Owners claim plans deliberately hidden</i>	NH38
	Mieszala, F., June 19	<i>Council's rush to impose controls baffling (Opinion)</i>	NH39
2014	Cronshaw, D., June 24	<i>Land controls drown values: Owners claim plans deliberately hidden</i>	NH40
	Kirkwood, I., December 3	<i>Building on shore lines</i>	NH41
	Cronshaw, D., December 10	<i>Sea will thwart levee</i>	NH42

The axial coding positioned the primary codes on an historical timeline. This established the shifting position of the newspaper and how it fed into the politics over local climate change adaptation. This axial coding established the process of the debate, including the hegemonic formation of constructing some signifiers as equal while dislocating others. It was from this analysis establishing a political frontier and with moving signifiers over time that we adopted the theoretical approach. Thus, while the analysis was inductive, the axial coding established the usefulness of discourse theory to explain the process.

Findings

The analysis of the newspaper coverage and interviews suggests that the paper contributed to disbelief about climate change and that it became an advocate for those opposing the adaptation policies. The newspaper articles put property values at the center of the debate, and suggested that it was the council, rather than climate change, which posed a threat to residents. In magnifying the dissenting viewpoints on climate change and the adaptation policy, the newspaper articles

Table 2. Participant interviews.

Data type	Description	Total no. 46
Business and Industry (total 13)		
Pseudonym	Role	Interview length
John	Property valuer	32 min
Ian	Journalist	59 min
Phil	Property developer	57 min
Jane	Sustainable building	63 min
Mark	Urban planning	47 min
James	Insurance	58 min
Matthew	Commercial development	58 min
Julia	Commercial real estate	42 min
Aaron	Property developer	44 min
Steve	Water consultant	44 min
Scott	Planning consultant	50 min
Andrew	Economics consultant	50 min
Bryan	Journalist	30 min
State government employees (total 3)		
Jacob	Current – manager, science division	59 min
Daniel	Former state government employee – science	49 min
Jasmine	Current – science	53 min
Experts (total 3)		
Chris	Consultation expert	49 min
William	Water and erosion expert	62 min
Anthony	Social impacts expert	38 min
Politicians (total 7)		
Tyler	Local councillor (Liberal Party)	72 min
Joseph	Local councillor (Labor Party)	42 min
Jonathan	Former councillor (Labor Party)	50 min
Noah	Former councillor (Labor Party)	47 min
Alex	Former mayor	48 min
Taylor	Former mayor	60 min
Amanda	Former councillor (Greens Party)	32 min
Council employees and ex-employees (total 10)		
Emma	Former employee – consultation facilitator	59 min
Olivia	Former employee – consultation facilitator	49 min
Thomas	Current employee – management	56 min
Eric	Current employee – co-ordinator	69 min
India	Current employee – community consultation	59 min
Owen	Former employee – management	54 min
Luke	Former employee – co-ordinator	53 min
Adam	Former employee – management	72 min
Gavin	Current employee – consultation facilitator	33 min
Cameron	Former employee – management	76 min
Community organization members (total 10)		
Sarah	Land owner – involved in local consultation	64 min
Kyle	Land owner – neighboring community organizer	94 min
Christian	Land owner – involved in local consultation	59 min
Sean	Land owner – involved in local consultation	61 min
Elizabeth	Land owner – involved in local consultation	77 min
Aidan	Local environment group organizer	38 min
Abigail	Land owner – involved in local consultation	50 min
Nathan	Regional environment group organizer	43 min
Carlos	Regional environment group organizer	58 min
Adrian	Regional environment group organizer	48 min

suggested that the changes were neither necessary nor appropriate. In the following sections we outline these aspects of the media coverage and the impacts they had on the debate.

Famous front pages

A range of articles in the *Newcastle Herald* early on articulated a link between the potential impacts of climate change and property values. In 2008, before the adoption of the council's *Sea Level Rise*

Preparedness Adaptation Policy that year, the paper ran a series of articles suggesting that properties were at risk from climate change, including headlines such as “We’re going under” (NH3), “Coast in danger of disappearing” (NH1) and “Homes under threat” (NH4). Drawing on government data, the paper created a map of the region and wrote that “Lake Macquarie would be transformed into a bay” (NH2). This article was followed up with a special feature including further maps, one of which showed a 300–500 year scenario in which 6,500 hectares would be inundated (NH4). As one of the journalists at the paper (Bryan) noted, this kind of sensationalism was regarded with a source of pride: “there’s a famous front page that shows Hunter Street [the main city street] as some sort of venetian canal”. These articles connected climate change with properties in articulating the direct threat of climate impacts.

Somewhat contradictorily, articles in the paper also suggested that by bringing attention to the risk through its policy development, the council itself was acting in ways which would harm property prices. As another of the journalists (Ian) from the paper at the time argued: “To me it was a big story because I knew it would affect a lot of people ... I knew it would affect people’s property rights.” These views were regularly reinforced with dramatic headlines, imagery, and cartoons which linked the council’s actions to lower property prices. One headline quoted \$1 billion being wiped off the suburb’s property values as a result of the council’s sea-level rise policy (NH28). The paper reported that because of the policy the council had to place “sea level rise” notations on about 10,000 properties and that these were impacting sales (NH35). In support, a local valuer was quoted arguing that property sales in very low-lying areas could be impeded as a result of the notations (NH5). Another headline suggested that the council was considering demolishing properties which were at risk of being inundated (NH24). This emphasis continued throughout the debate, with regular headlines and quotes from residents arguing that insurance costs were going up, and property values were going down. The *Newcastle Herald* established properties as the key signifier to understand the impact of climate change.

The dramatic coverage of the issue contributed to residents’ concern that their properties were at risk – whether it be from climate change, or the council. Over the course of the debate, the paper published cartoons which included depictions of houses on stilts, the council building needing a speedboat for its emergency exit, likening sea-level rise to the risk of a shark attack, and various forms of houseboats (NH37). One story which was mentioned by several interviewees featured floating houses to combat sea-level rise:

when it first came out, one of the things that they talked about as never, never possible things is floating houses. Front page of *The Herald* is – ‘Lake Macquarie is going to have floating houses.’ He [the journalist] rang me and ... he said ‘what do you think about floating houses?’ I said, ‘well, they would be the extreme of technological responses’ ... He said ‘yeah, but these are such great photos’. What he was worried about was the photo that he could get on the front page. (Joseph, politician).

This same article was noted by a former councillor as having “sparked a lot of fear amongst the residents that, “what the hell’s going to happen to my home?”” (Noah). The coverage in the newspaper was contradictory in relation to climate change – on the one hand suggesting there would be quite dramatic impacts while on the other arguing that the council measures were putting prices at risk. Both depictions put property at the center and led to fear in the community. One of the outcomes of this fear was an insistence from those involved in the consultation process that “retreat is not an option” (NH42). Property value became a nodal point, around which discourses of rights, security and economic value were structured in opposition to climate change.

Eroding the science

While the newspaper coverage at times emphasized the risks posed by climate change, it also repeated the arguments put forward by climate sceptics. Interview participants argued that the newspaper was particularly inclined to giving greater coverage to “that one dissenting voice” (Adam, former council employee). As one interviewee noted:

I don't know [journalist name] well enough to know if he was really sympathetic to the climate sceptic types. They were newsworthy. There was conflict, therefore it's news. So, therefore, 'I'll give them air'. But definitely by giving them oxygen, it helped to facilitate the sort of hostility to what council was trying to do. (Luke, former council employee)

With climate change at the center of the proposals, those opposing the plan drew on arguments about the uncertainty of the science and blatant denial to suggest that there was no need for the policies. This coverage, then, had the effect of eroding the scientific basis for the changes, suggesting that the council's plans were overly cautious, and perhaps entirely unnecessary. The newspaper undermined the scientific significance of climate change and dislocated "climate change" from science: it could then be connected to the opposite position in arguing against climate adaptation policies.

In both the paper's own commentary on the issue, and extensive quoting of particular viewpoints, the paper "gave voice" to scepticism within the debate. For example, quoting local politicians saying that "rising sea level predictions are not based on fact" (NH9), a claim which was repeated in interviews with community participants. When three well-known climate sceptics were engaged by a local property developer – Jeff McCloy – to speak at a public meeting, the paper labeled them as "scientific experts" (NH12). The same article quoted McCloy as saying that "there is research that suggests rises in sea levels are decelerating" (NH12). In reporting on the meeting the following day, the paper focussed almost entirely on the views of the developer and the sceptics (NH14). Later that year, the paper echoed McCloy's claims and published an article interpreting government agency data to suggest that sea levels were not rising (NH15). These views were also echoed by doubtful property owners in the papers, one of whom referred to the council policy being based on "a lot of presumption and guessing" (NH33), with others stating that the council was engaging in "over-anxious, climate-change alarmism" (NH34) and that sea-level rise predictions were an "absolute furphy" (NH36).

In addition, the paper's own commentary often took up the issue of uncertainty itself, writing that there were "concerns that predictions are uncertain and may be alarmist" (NH19). Such views were reinforced in an editorial: "The year 2100 is a long way off, and the extent of possible sea level rise between now and then is highly contentious, to say the least." (NH7). In the months following, two prominent climate sceptics wrote opinion pieces claiming sea level rise was "based on utterly unrealistic science" (NH27) and "unproven predictions rather than what is actually happening" (NH32). These views about the lack of sea level rise were repeated by property owners, one of whom wrote, in an opinion piece for the *Newcastle Herald*: "The residents raise the questions of the validity of the science at every forum. People look out their window and have not noticed any change in lake levels in their lifetimes" (NH39).

The sceptical arguments in the *Newcastle Herald* implied that adaptation measures were not necessary. Indeed, the paper itself ran an online poll in which "more than half of respondents believed sea levels would not rise" (NH26). For their part, those opposed to the measures, when interviewed, also reflected doubt about the science:

is that climate change? ... It's just a natural thing going on, but you can't have a reasonable conversation about what's natural and going on when you've got council [and you're] being hammered over the head (Sarah, community organisation member)

This suggests that, even though the residents participated in the adaptation planning process, they did not necessarily do so with the potential impacts of climate change in mind. As one senior council staff member noted, the repetition of climate scepticism in the paper created a "perfect storm" (Emily) and was widely seen as encouraging doubt in the broader community about the need for adaptation measures: "climate change was very much ... the hook that people were fed. The hook was you don't need to do this because this is all crap" (Joseph, councillor). Despite the efforts of the council, placing climate science at the center of their planning process was strongly resisted. With the maintenance of property values at the center of discussion, the prominence of

climate scepticism gave a discursive “out” of the risks it might present. Climate change thus became a floating signifier that could be attached to arguing for adaptation measures as well as against actions in that the uncertainty of science suggested it was unnecessary.

Shaming the council

The coverage of climate adaptation in the paper also eroded the authority of the council and invoked an antagonism between those for and against climate adaptation. While council staff and many councillors described the paper as “particularly hostile” (Emily, council employee) and “antagonistic” (Noah, former councillor), those opposing the planning changes spoke specifically about engaging the journalists at the paper in their cause. As one member of council staff put it:

there was a lot of negative media around at the time. The local paper was quite – obviously siding with its readers and its constituents and generating that anti-government kind of rhetoric. Particularly, everyone likes to bash Council. (Eric)

Interviewees argued that the council was depicted in the paper as being dishonest and initiating actions which would have a negative impact on residents. Antagonism was established in the newspaper’s coverage.

In contesting the adaptation plans, the paper was strategically engaged by a local developer, who embarked on a concerted campaign to discredit the council’s policy. He threatened to “mount a class action against Lake Macquarie City Council for devaluing waterfront properties with its climate change policy” (NH8). While this threat never eventuated, it was widely reported by the *Newcastle Herald* at the time (NH12, NH14, NH16, NH17, NH18, NH20, NH25), including a front page article (NH8), and a cartoon representing the developer as leading the cause of defending property rights against the council (NH10). Although a former council staff member (Olivia) argued that it was just engaging in “smoke and mirrors” in order to get the council’s and “the media’s attention”, another (Taylor) said that they found the unfavorable stance by the newspaper to be relentless: “It was sort of debilitating to be under attack all the time, you know? Always being criticized by the paper”. The final adaptation plan echoed a developer’s entreaties from 2011, when they “urged councillors to ... adopt an approach of “watching, waiting and observing to avoid causing devaluation of lakeside properties and further unnecessary cost for ratepayers”” (NH11).

Indeed, one of the councillors who was opposed to the measures described using the newspaper to put pressure on other councillors as a deliberate strategy of “embarrassment power” (Tyler, politician). Being a minority member of council at the time, this politician saw it as one of their few means of having influence:

The media did get on board. The media liked it and I liked it, because it was easy to slip in one-liners that made me look good and made council look stupid ... If you haven’t got a majority you don’t have any real power other than inquisitorial, so you can ask questions ... Or you’ve got embarrassment power, which is you either do that through your inquisitorial power or through the media ... I just exploited the hail Mary out of the media pressure as best I could. (Tyler, politician)

Dissenting councillors were regularly quoted in the paper, arguing that “residents were being treated as “collateral damage”” (NH31), that the council was being illogical in its policies (NH23), and that councillors were “hiding behind council staff” while “smash[ing] people’s dreams” (NH40). In doing so, the *Newcastle Herald* participated in the differentiation of those who supported the climate adaptation and those opposed, exacerbating the conflict.

The council’s approach to sea-level rise planning was variously described in the newspaper as “zealous” (NH22), “overkill” (NH26) and as “hardline, harsh and presumptuous” (NH34). An editorial drew an unfavorable contrast between LMCC as “pushing ahead” with the actions of an adjacent council which had dropped sea level rise planning as a consequence of public pressure (NH25). This criticism was repeated in following years with an opinion piece by a *Newcastle Herald* journalist claiming that the council: “has been more aggressive than most in its planning responses to sea

level rise, to the point where it is regularly accused of being out of step with other local government areas" (NH41). Interviewees also noted this portrayal of the council as being an outlier in its approach to sea level rise. A council employee suggested that the newspaper represented LMCC as "doing its thing on its own" (Eric), and that residents felt they were being unfairly targeted. One of the former councillors reflected that: "the media narrative [was] about it being kind of council overreach" or as overstepping the bounds of its authority by not sticking to "the roads, rates, and rubbish stuff" (Amanda).

Interviewees thus argued that the newspaper had a part to play in provoking community antagonism towards the council's efforts: "behind the scenes, that was just generating some really unconstructive discussions with the community, and really, actually, it was spreading misinformation" (Eric, council employee). By shaming the council, the media coverage contributed to a general mistrust in what the council was trying to do, which made the actions of the council in attempting to include residents in the process extremely difficult. At the same time, the paper built constructive relationships with those publicly opposing the policies, including developers and dissenting councillors, creating an equivalence against the council.

Advocating "rights"

Beyond reporting on existing conflict and information, coverage in the paper depicted property owners as negatively impacted by the council's actions. This coverage focussed on opposition to the measures, with little mention of environmental concerns. The political frontier was clearly articulated, with the paper participating in the spread of fear in the community about the future of their properties, while also arguing that the council was impinging on people's rights. The nodal point of properties was connected to stories of the financial burden of adhering to the development restrictions, the emotional strain among property owners, and rejections of particular projects. Participants also discussed these issues during interviews, where the political frontier became evident. While councillors and council staff tended to talk about having a difficult relationship with the newspaper, property owners noted a much more positive experience, with one noting that they considered one of the journalists a "friend" (Sean, community organization).

The newspaper recounted stories about house sales falling through (NH34) and property values declining as buyers used the flooding notations to negotiate lower prices (NH35). One story discussed a resident having to pay \$30,000AUD in additional costs to raise floor levels, as well as residents facing increased home insurance premiums and being unable to insure against sea-level rise (NH6). The *Newcastle Herald* quoted stakeholders who viewed the council's actions as attacking property rights, while repeating the statements that the council was "devaluing and restricting properties with its sea level rise policy" (or similar wording) in multiple articles (NH13, NH20, NH21).

These articles were not only focussed on how residents were being financially damaged by the council's actions but depicting them as victims of the council's actions. Following suggestions that homes could be left "worthless because they cannot be sold" (NH29) one working-class resident (a status noted by the paper) was quoted as saying: "we might live on the water, but I'm a carpenter by trade and I worked in the coalmines ... This is our nest egg" (NH30). The paper also highlighted examples of residents being unable to build dual-occupancy residences on their existing property to fund their retirement (NH33, NH38). These reports led to numerous appeals against decisions made by council staff being brought directly to the council: "I just remember lots of VIP requests coming from Councillors ... And a lot of those requests were generated because of the concerns and misinformation coming via the media." (Eric, council employee). A number of these appeals were successful, with one council member, who was supportive of the property owners, saying: "the political embarrassment, the media pressure is what led to the change in the councillors, who were under pressure from the bureaucrats" (Tyler).

As a result of this coverage, interviewees in the residents group saw the journalists and the newspaper as aligned with their own interests in rejecting the adaptation measures and protecting

property values. They spoke about working with journalists on articles to bring attention to the issue: “He [journalist] was very good. I did phone him up and say do you want a story? There was one story ... called “Baywatch” which was the residents keeping an eye on sea level” (Sean, community organization). For their part, one of the journalists argued that they saw it as an issue of protecting people’s rights:

the residents would raise it and say, “this is outrageous”, and I’d give them a say, and I’d go to the council and it was always a reactive public relations response. So, I was proud of what I did ... I gave it the attention it deserved because property rights are extremely important, and people’s rights are important. (Ian, journalist)

By advocating against the council’s plans, the paper’s coverage further drew on the reputational expectation of local media newspapers as important arbiters of local conflicts. Through its depiction of residents as suffering at the hands of climate adaptation, via the council, the paper shifted from being an arena for voicing antagonistic elements, to embedding itself within the logic of equivalence around property values. It became at once defender and a definer of “rights”. In positioning itself as aligned with those opposing the adaptation measures, the paper drew an equivalence among those opposed to both the discourse and the actions of the council. Thus, against this logic of equivalence of property rights, represented by a particular “we”, sat the council, which, in seeking to act upon climate change, was constructed as an outer “they”.

Discussion

By highlighting the conflict between those opposing the adaptation policies and those supporting them, the actions of the newspaper might be seen in positive terms as revealing the real “politics” of the situation (Kvidal-Røvik, 2018) – that acknowledging climate change vulnerability has the potential to threaten short term property values. Such a situation may have the potential to assist in increasing transparency and engagement in democratic processes. Indeed, it seems that the reported conflict, at least in part, was motivating the council to engage the community. However, we argue that views perpetuated in the newspaper were crucial discursive elements which, rather than assisting in open debate, operated to build a *chain of equivalence* between the interests of the property owners and developers against the council’s plan for climate adaptation. Through the newspaper’s sensationalized coverage, climate change was depicted not so much as an environmental and broader social concern, but rather a threat to individual’s property rights and value. Thus, began the process of defining what was included and excluded in the chain of equivalence; constructing a *political frontier* with property as the nodal point. An alliance was formed around these connections, rather than a concern for climate adaptation measures – residents, local developers, and others combined to oppose the policy altogether.

The newspaper engaged in numerous media norms in its coverage of climate change, early on creating a drama (climate change), but then also questioning the science. By giving authority to climate sceptics, the coverage opened up a space in which climate change could be interpreted through individual opinion – or, indeed, interests (Ballantyne et al., 2018). Given the emphasis on climate change induced sea-level rise from the council, the questions over climate change in the newspaper coverage supported residents’ observations that they had not seen lake levels rise, and therefore climate change was not a present concern. Thus, in contrast to the alarming “famous front pages” of the paper, residents constructed an opposing view that allowed the avoidance of environmental concerns in order to maintain the existing scenario whereby their houses were not at risk. Through this coverage climate change became a complete contradiction of representation and meaning – it was at times described as a major threat, and at others, as perhaps not even existing – it became a “floating signifier”, serving both those supporting and opposing climate adaptation plans.

At the same time, the newspaper coverage fostered mistrust in the council and undermined its authority. In emphasizing the importance of private property, the newspaper joined others in drawing an equivalence between the existing hegemony of economic prosperity, security, and individual

rights, which were constructed in opposition to climate change. Further, the newspaper aligned itself with the cause of those opposing the adaptation policies, shifting from being an arena in which debate occurred, to a partisan advocate for some residents and property owners. As a key source of information in the local area, the paper dislocated understandings of climate change and centered the debate around the existing hegemony – that property values and the rights of waterfront property-owners were of primary importance.

The analysis of the local debate around climate adaption contributes to the discussion of media representation of climate change by detailing how the paper informed the debate over time. While media's influence on climate change debates is well established (Boykoff, 2008, 2013; Miliauskas & Anderson, 2016), this discussion is overwhelmingly conducted at the national level (Schäfer & Schlichting, 2014). Our analysis of a regional paper and interviewing key participants in the debate show how media matters. In our case, the local paper took an active part in establishing a political frontier through divisive reporting. Within the local debate, the paper sided with the hegemonic position around the nodal point of properties in acting as a key element of the chain of equivalence.

Further, the paper was used by participants in the local debate to cement the differentiation between actors' identities and interests (Laclau & Mouffe, 1985). It is arguably not surprising that a regional newspaper sides with residents who buy the paper, however, in this case specific councillors and resident groups exploited the media for "embarrassment power" that undermined the council's work. This is interesting in that it feeds into an anti-government rhetoric that arguably makes it harder for local governments to assist their residents in addressing their concerns. It is the residents who vote for the councillors, who then direct the council's work. That local media willingly seeds distrust between residents and elected politicians, and so easily manipulates public debate, is worrying for representative democracy. The role of media as political actor rather than an arena for deliberation undermines the possibility of deliberation.

In this article, we have sought to explain the contradictions and conflicts within this debate in order to bring to the fore the key elements of antagonism. That is, when climate adaptation is seen to impose an economic cost, particular actors with shorter-term interests will organize to defend the hegemonic position. While this is something that is commonly observed in the broader climate change debates about climate change mitigation (primarily in regards to large scale economic policies), it is a somewhat surprising finding in communities which are vulnerable to climate impacts. In particular, the position of the local newspaper functioned to sideline the broader collective vulnerabilities to climate change in favor of participating in the creation of an economic frontier.

Conclusion

Our case study describes a process whereby the political negotiations around climate adaptation are overwhelmed by concern for property. In outlining the role of the local newspaper in framing these debates, we have sought to make visible the ways in which power is mobilized through the discursive formation of chains of equivalence. In this we have gone beyond identifying the reporting of climate discourse or scepticism and attempted to outline the ways in which local newspapers can become actors within these debates. We note that this is only a single case study, with specific local dynamics at play. However, we suggest that the findings can be used to further investigate how media can be a key actor in our responses to climate change more generally.

While the result in this case was the reimposition of hegemonic values of private property, we see further potential for the use of Laclau and Mouffe's theoretical framework to identify how such chains of equivalence might also be broken, or indeed, constructed in a completely different way. As Mouffe has noted "Every hegemony can be challenged" (in Carpentier & Cammaerts, 2006, p. 967). For instance, as Carvalho and Peterson (2012, p. 16) have pointed out, "it is (almost) always possible to challenge and modify political ideas and political arrangements through alternative discourses that may be created and promoted by certain individuals, groups, or critical

communities”. Unfortunately in this case, the broader community was missing, with vocal resident groups dominating the articulation of public concern.

Following Brown (2016), we argue that the different meanings given to climate change illustrate the possibility for a radical response. However, it is only through making transparent the processes of constructing hegemony that we can identify that potential. In processes of local climate adaptation, we suggest that it is possible for a new chain of equivalence to be formed, which necessitates the formation of a new discourse in which climate change becomes a nodal point for fundamental social change. While outlining such a strategy is beyond the ambit of this paper, we suggest it would involve clearly explaining the impacts of climate change, strengthening science in planning, and increasing democratic participation in governance, all of which should lead to a collective sense of responsibility for responding to climate change.

First, shoring up the science of climate change as a nodal point for action is necessary to avoid it being used for opposing reasons. Second, the limited engagement of residents beyond those with vulnerable real estate, suggests the necessity for further democratic participation. In our case, a minority of residents steered the debate, often employing local media to support their own purpose. Third, the established hegemonic formation around economic value, and the central role of property therein, is difficult to attack head-on. Building a politics where maintaining a habitable climate is a priority, rather than particular economic values, has proven a difficult task. There are numerous challenges here; such practices are both complex and time consuming, and it requires a choice by those in all types of media as to whether they are willing to challenge the norms in which they currently engage. If the answer is “yes”, the question then becomes whether the climate can wait.

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References

- Anderson, D., Chubb, P., & Djerf-Pierre, M. (2018). Fanning the blame: Media accountability, climate and crisis on the Australian “fire continent”. *Environmental Communication*, 12(7), 928–941. <https://doi.org/10.1080/17524032.2018.1424008>
- Australian Bureau of Statistics (ABS). (2019). *Estimated residential population by local government area 2001–2019*. http://stat.data.abs.gov.au/Index.aspx?DataSetCode=ABS_ERP_LGA2019.
- Ballantyne, A. G., Glaas, E., Neset, T.-S., & Wibeck, V. (2018). Localizing climate change: Nordic homeowners’ interpretations of visual representations for climate adaptation. *Environmental Communication*, 12(5), 638–652. <https://doi.org/10.1080/17524032.2017.1412997>
- Bennett, W. L. (2009). *News: The politics of illusion*. Pearson Longman.
- Boykoff, M. T. (2008). The cultural politics of climate change discourse in UK tabloids. *Political Geography*, 27(5), 549–569. <https://doi.org/10.1016/j.polgeo.2008.05.002>
- Boykoff, M. T. (2011). *Who speaks for the climate? Making sense of media reporting on climate change*. Cambridge University Press.
- Boykoff, M. T. (2013). Public enemy No. 1? Understanding media representations of outlier views on climate change. *American Behavioral Scientist*, 57(6), 796–817. <https://doi.org/10.1177/0002764213476846>
- Boykoff, M. T., & Boykoff, J. M. (2007). Climate change and journalistic norms: A case-study of US mass-media coverage. *Geoforum; Journal of Physical, Human, and Regional Geosciences*, 38(6), 1190–1204. <https://doi.org/10.1016/j.geoforum.2007.01.008>
- Brown, T. (2016). Sustainability as empty signifier: Its rise, fall, and radical potential. *Antipode*, 48(1), 115–133. <https://doi.org/10.1111/anti.12164>
- Brulle, R. J., & Norgaard, K. M. (2019). Avoiding cultural trauma: Climate change and social inertia. *Environmental Politics*, 28(5), 886–908. <https://doi.org/10.1080/09644016.2018.1562138>
- Carpentier, N., & Cammaerts, B. (2006). Hegemony, democracy, agonism and journalism. *Journalism Studies*, 7(6), 964–975. <https://doi.org/10.1080/14616700600980728>
- Carvalho, A., & Peterson, T. (2012). Reinventing the political: How climate change communication can breathe new life into contemporary democracies. In A. Carvalho, & T. Peterson (Eds.), *Climate change politics: Communication and public engagement* (pp. 1–28). Cambria Press.

- Connor, L. H. (2010). Anthropogenic climate change and cultural crisis: An anthropological perspective. *Journal of Australian Political Economy*, 66, 247–267.
- Crabbé, P., & Robin, M. (2006). Institutional adaptation of water resource infrastructures to climate change in Eastern Ontario. *Climatic Change*, 78(1), 103–133. <https://doi.org/10.1007/s10584-006-9087-5>
- Fünfgeld, H., & McEvoy, D. (2014). Frame divergence in climate change adaptation policy: Insights from Australian local government planning. *Environment and Planning C: Government and Policy*, 32(4), 603–622. <https://doi.org/10.1068/c1234>
- Gibbs, M. T. (2016). Why is coastal retreat so hard to implement? Understanding the political risk of coastal adaptation pathways. *Ocean & Coastal Management*, 130, 107–114. <https://doi.org/10.1016/j.ocecoaman.2016.06.002>
- Giles, G., Boyle, T., Howe, A., Stevens, H., & Pope, S. (2016). *Planning to adapt: The marks point and Belmont South local adaptation plan. Case Study for CoastAdapt*. Gold Coast.
- Gramsci, A. (1971). *Selections from the prison notebooks*. International Publishers.
- Gunster, S., Fleet, D., Paterson, M., & Saurette, P. (2018). Climate hypocrisies: A comparative study of news discourse. *Environmental Communication*, 12(6), 773–793. <https://doi.org/10.1080/17524032.2018.1474784>
- Habermas, J. (1996). *Between facts and norms: Contributions to a discourse theory of law and democracy* (W. Rehg, Trans.). MIT Press.
- Harcourt, R., Bruine de Bruin, W., Dessai, S., & Taylor, A. (2020). What adaptation stories are UK newspapers telling? A narrative analysis. *Environmental Communication*, 1–18. <https://doi.org/10.1080/17524032.2020.1767672>
- Howarth, C., & Anderson, A. (2019). Increasing local salience of climate change: The un-tapped impact of the media-science interface. *Environmental Communication*, 13(6), 713–722. <https://doi.org/10.1080/17524032.2019.1611615>
- IPCC. (2013). *Climate change 2013: The physical science basis. Working group I contribution to the fifth assessment report of the intergovernmental panel on climate change* (T. F. Stocker, Ed.). Cambridge: Cambridge University Press and New York, NY, USA.
- Jones, P. K., & Pusey, M. (2010). Political communication and ‘media system’: The Australian canary. *Media, Culture & Society*, 32(3), 451–471. <https://doi.org/10.1177/0163443709361172>
- Kenis, A., & Mathijs, E. (2014). Climate change and post-politics: Repoliticizing the present by imagining the future? *Geoforum; Journal of Physical, Human, and Regional Geosciences*, 52, 148–156. <https://doi.org/10.1016/j.geoforum.2014.01.009>
- King, G., Schneer, B., & White, A. (2017). How the news media activate public expression and influence national agendas. *Science*, 358(6364), 776–780. <https://doi.org/10.1126/science.aao1100>
- Konisky, D. M., Hughes, L., & Kaylor, C. H. (2016). Extreme weather events and climate change concern. *Climatic Change*, 134(4), 533–547. <https://doi.org/10.1007/s10584-015-1555-3>
- Kvidal-Røvik, T. (2018). Nature articulations in Norwegian advertising discourse: A depoliticized discourse of climate change. *Environmental Communication*, 12(6), 794–806. <https://doi.org/10.1080/17524032.2018.1482835>
- Laclau, E. (2005). *On populist reason*. Verso.
- Laclau, E., & Mouffe, C. (1985). *Hegemony and socialist strategy: Towards a radical democratic politics*. Verso.
- Lake Macquarie City Council (LMCC). (2008). *Lake Macquarie sea level rise preparedness adaptation policy*. https://www.nccarf.edu.au/sites/default/files/attached_files/Austr_Lake_Macquarie_Adaptation_Policy_-_NSW_Govt_2008.pdf
- Lake Macquarie City Council (LMCC). (2016). *Planning for future flood risks marks point and Belmont South local adaptation plan: A plan for marks point and Belmont South to adapt to changing lake and flood levels. Volume 1: Summary*. <http://www.haveyoursaylakemac.com.au/future-flood-planning>
- Leitch, A. (2017). Climate change: Local governments adapting to the wicked problem of sea level rise. In N. Sipe & K. Vell (Eds.), *The Routledge Handbook of Australian urban and regional planning* (pp. 231–253). Routledge.
- Leitch, A., & Robinson, C. (2012). Shifting sands: Uncertainty and a local community response to sea levels and policy in Australia. In T. Measham & S. Lockie (Eds.), *Risk and social theory in environmental management* (pp. 117–131). CSIRO Publishing.
- Lester, L., & Cottle, S. (2009). Visualising climate change: Television news and ecological citizenship. *International Journal of Communication*, 3, 920–936.
- Lidberg, J. (2018). Australian media coverage of two pivotal climate change summits: A comparative study between COP15 and COP21. *Pacific Journalism Review: Te Koakoa*, 24(1), 70–86. <https://doi.org/10.24135/pjr.v24i1.405>
- Machin, A. (2019). Changing the story? The discourse of ecological modernisation in the European Union. *Environmental Politics*, 28(2), 208–227. <https://doi.org/10.1080/09644016.2019.1549780>
- McKewon, E. (2012). Duelling realities: Conspiracy theories vs climate science in regional newspaper coverage of Ian Plimer’s book, *Heaven and Earth*. *Rural Society*, 21(2), 99–115. <https://doi.org/10.5172/rsj.2012.21.2.99>
- McKnight, D. (2010). A change in the climate? The journalism of opinion at News Corporation. *Journalism: Theory, Practice & Criticism*, 11(6), 693–706. <https://doi.org/10.1177/1464884910379704>

- Methmann, C. P. (2010). 'Climate protection' as empty signifier: A discourse theoretical perspective on climate mainstreaming in world politics. *Millennium: Journal of International Studies*, 39(2), 345–372. <https://doi.org/10.1177/0305829810383606>
- Miliauskas, A., & Anderson, H. (2016). Uncertainty framing and the IPCC 'fifth assessment report'. *Australian Journalism Review*, 38(2), 143–154.
- Moloney, S., & Fünfgeld, H. (2015). Emergent processes of adaptive capacity building: Local government climate change alliances and networks in Melbourne. *Urban Climate*, 14, 30–40. <https://doi.org/10.1016/j.uclim.2015.06.009>
- Moser, S. C. (2016). Reflections on climate change communication research and practice in the second decade of the 21st century: What more is there to say? *Wiley Interdisciplinary Reviews: Climate Change*, 7(3), 345–369. <https://doi.org/10.1002/wcc.403>
- Moser, S. C., & Pike, C. (2015). Community engagement on adaptation: Meeting a growing capacity need. *Urban Climate*, 14, 111–115. <https://doi.org/10.1016/j.uclim.2015.06.006>
- Mouffe, C. (1999). Deliberative democracy or agonistic pluralism? *Social Research*, 66(3), 745–758.
- Mouffe, C. (2018). *For a left populism*. Verso.
- Newcastle Herald. (2015, October 4). Seachange in council restrictions (Editorial), Editorial. *Newcastle Herald*, 10.
- NSW Parliament, Piper, G., & Stokes, R. (2012). *Private members' statements: Climate change and sea level rise (15 March)*. <https://www.parliament.nsw.gov.au/Hansard/Pages/HansardResult.aspx#/docid/HANSARD-1323879322-75688/link/41>
- Nyberg, D., Spicer, A., & Wright, C. (2013). Incorporating citizens: Corporate political engagement with climate change in Australia. *Organization*, 20(3), 433–453. <https://doi.org/10.1177/1350508413478585>
- O'Neill, S. J. (2013). Image matters: Climate change imagery in US, UK and Australian newspapers. *Geoforum; Journal of Physical, Human, and Regional Geosciences*, 49, 10–19. <https://doi.org/10.1016/j.geoforum.2013.04.030>
- Painter, J. (2013). *Climate change in the media: Reporting risk and uncertainty*. I.B. Tauris & Co. Ltd in association with the Reuters Institute for the Study of Journalism, University of Oxford.
- Papandrea, F., & Tiffen, R. (2016). Media ownership and concentration in Australia. In E. M. Noam & I. M. C. Collaboration (Eds.), *Who owns the world's media? Media concentration and ownership around the world* (pp. 703–739). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199987238.003.0023>
- Romsdahl, R. J., Kirilenko, A., Wood, R. S., & Hultquist, A. (2017). Assessing national discourse and local governance framing of climate change for adaptation in the United Kingdom. *Environmental Communication*, 11(4), 515–536. <https://doi.org/10.1080/17524032.2016.1275732>
- Roy Morgan Research. (2011). *Roy Morgan readership results for the year ending December 2010*. <http://www.roymorgan.com/industries/media/readership/readership-archive>
- Roy Morgan Research. (2017). *Roy Morgan Readership results for the year ending March 2017*. <http://www.roymorgan.com/industries/media/readership/readership-archive>
- Ruiu, M. L. (2020). Persistence of scepticism in media reporting on climate change: The case of British newspapers. *Environmental Communication*, 1–15. <https://doi.org/10.1080/17524032.2020.1775672>
- Schäfer, M. S., & Schlichting, I. (2014). Media representations of climate change: A meta-analysis of the research field. *Environmental Communication*, 8(2), 142–160. <https://doi.org/10.1080/17524032.2014.914050>
- Serrao-Neumann, S., Harman, B., Leitch, A., & Low Choy, D. (2015). Public engagement and climate adaptation: Insights from three local governments in Australia. *Journal of Environmental Planning and Management*, 58(7), 1196–1216. <https://doi.org/10.1080/09640568.2014.920306>
- Stewart, D. (2017, May 4). Lake Macquarie City Council wins PIA National Award for Planning Excellence for its local sea-level rise adaptation plan. *Lakes Mail*. <https://www.lakesmail.com.au/story/4640904/council-awarded-for-winning-residents-over-on-sea-level-rise-plan/>
- Tranter, B. (2020). Does public knowledge of climate change really matter in Australia? *Environmental Communication*, 14(4), 537–554. <https://doi.org/10.1080/17524032.2019.1696853>
- Warren-Myers, G., Aschwanden, G., Fuerst, F., & Krause, A. (2018). Estimating the potential risks of sea level rise for public and private property ownership, occupation and management. *Risks*, 6(2), 37. <https://doi.org/10.3390/risks6020037>
- Yacoumis, P. (2018). Making progress? Reproducing hegemony through discourses of "sustainable development" in the Australian news media. *Environmental Communication*, 12(6), 840–853. <https://doi.org/10.1080/17524032.2017.1308405>